Figure 1. Process Flow Diagram for Scheme 1
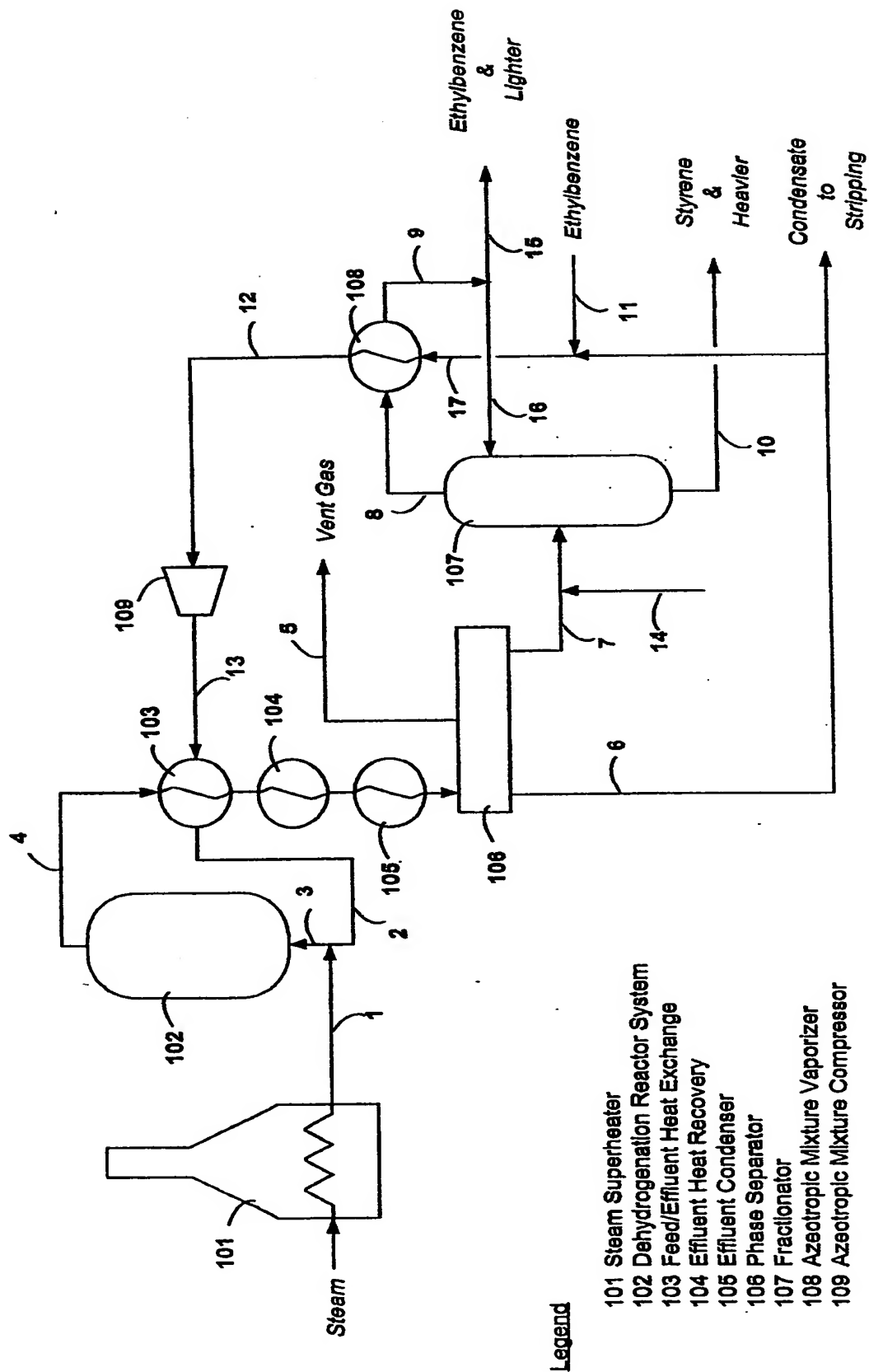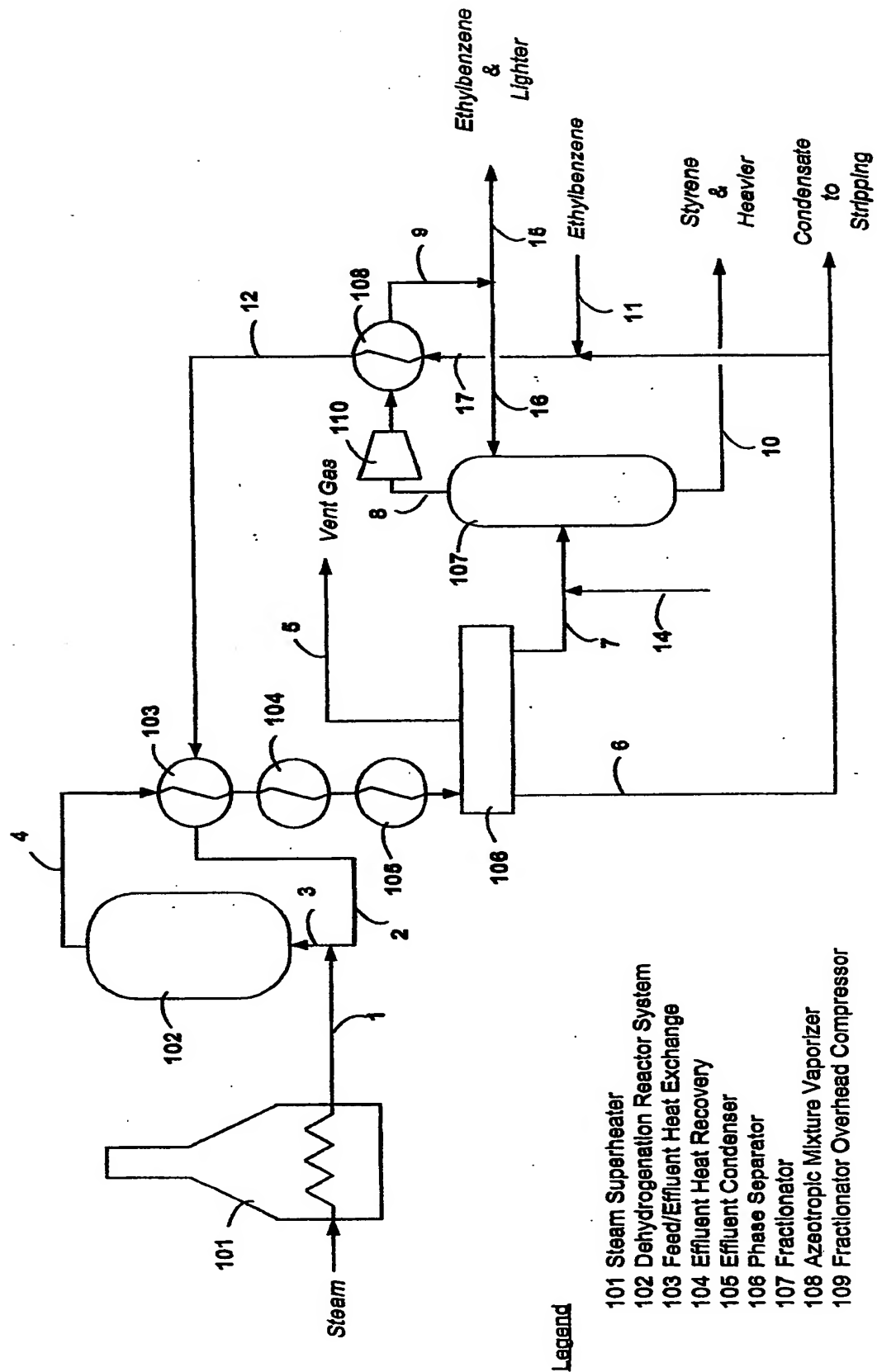

Legend

101 Steam Superheater
102 Dehydrogenation Reactor System
103 Feed/Effluent Heat Exchange
104 Effluent Heat Recovery
105 Effluent Condenser
106 Phase Separator
107 Fractionator
108 Azeotropic Mixture Vaporizer
109 Azeotropic Mixture Compressor

Figure 2. Process Flow Diagram for Scheme 2

Legend

101 Steam Superheater
102 Dehydrogenation Reactor System
103 Feed/Effluent Heat Exchange
104 Effluent Heat Recovery
105 Effluent Condenser
106 Phase Separator
107 Fractionator
108 Azeotropic Mixture Vaporizer
109 Fractionator Overhead Compressor

Figure 3. Process Flow Diagram for Scheme 3

Legend

101 Steam Superheater
102 Dehydrogenation Reactor System
103 Feed/Effluent Heat Exchange
104 Effluent Heat Recovery
105 Effluent Condenser
106 Phase Separator
107 Fractionator
108 Azeotropic Mixture Vaporizer
109 Azeotropic Mixture Compressor
110 Fractionator Overhead Compressor